

AMENDMENTS TO THE CLAIMS

The following is a complete, marked-up listing of revised claims with a status identifier in parenthesis, underlined text indicating insertions, and strike through and/or double-bracketed text indicating deletions.

LISTING OF CLAIMS

1. (Currently Amended) A recording medium ~~storing a data structure for managing reproduction of data streams having a plurality of reproduction paths,~~ comprising:

a data area storing a plurality of transport packets of the data streams for a plurality of reproduction paths, the transport packets having respective packet identifiers (PID); and

a navigation area storing a playlist for managing playback of the data streams, the playlist including a plurality of playitems indicating a playing interval of the data streams, each of the playing intervals including an IN-point and OUT-point indicating positions of the data streams, and each of the playitem~~playitems~~ including a packet identifier information~~stream indication~~ field indicating the packet identifier (PID) of the transport packets ~~associated with the playitem such that the packet identifier information field identifies~~ for a reproduction path among the plurality of reproduction paths ~~for the playing interval of each of the playitems, where the identified reproduction path of each of the playitems is determined from among a plurality of the data streams.~~

2-4. (Cancelled)

5. (Previously Presented) The recording medium of claim 1, wherein the data streams are elementary data streams.

6. (Cancelled)

7. (Previously Presented) The recording medium of claim 1, wherein the data area stores the data streams multiplexed together.

8-12. (Cancelled)

13. (Previously Presented) The recording medium of claim 1, wherein the data streams include video data streams.

14. (Previously Presented) The recording medium of claim 13, wherein the data streams further include at least one of audio data streams, graphics data streams and subtitle data streams.

15-16. (Cancelled)

17. (Currently Amended) A method of recording ~~[[a]]data structure for managing reproduction of data streams having a plurality of reproduction paths recorded on a recording medium, the method comprising:~~

recording a plurality of transport packets of the data streams for a plurality of reproduction paths on ~~in a data area of~~ the recording medium, the transport packets having respective packet identifiers (PID); and

recording a playlist including a plurality of playitems indicating a playing interval of the data streams ~~on a navigation area of~~ the recording medium, each of the playing intervals including an IN-point and OUT-point indicating positions of the data streams, ~~and each of the playitem~~ playitems including a ~~packet identifier information~~ stream indication field indicating the packet identifier (PID) of the transport packets associated with the playitem such that the packet identifier ~~information field identifies for~~ a reproduction path among the plurality of reproduction paths ~~for the playing interval of each of the playitems, where the identified reproduction path of each of the playitems is determined from among a plurality of the data streams.~~

18. (Currently Amended) A method of reproducing ~~[[a]]data from structure for managing reproduction of data streams having a plurality of reproduction paths recorded on~~ a recording medium, the method comprising:

reading ~~reproducing~~ a playlist including a plurality of playitems indicating a playing interval of the data streams for a plurality of reproduction paths from a ~~navigation area of~~ the recording medium, each of the playing intervals including an IN-point and OUT-point indicating positions of the data streams, ~~and each of the playitem~~ playitems including a ~~packet identifier information~~ stream indication field indicating a packet identifier (PID) of ~~[[a]]transport packets~~ packet of the data streams associated with the playitem such that the packet identifier information field ~~identifies for~~ a reproduction path among the plurality of reproduction paths ~~for the playing interval of each of the playitems, where the identified reproduction path of each of the playitems is determined from among a plurality of the data streams; and~~

reproducing a data stream of the transport packet~~packets~~ having the packet identifier indicated by the ~~packet identifier information field~~stream indication field from ~~a data area of the recording medium.~~

19. (Currently Amended) An apparatus for recording ~~[[a]]data structure for managing reproduction of data streams having a plurality of reproduction paths on a recording medium, the apparatus comprising:~~

a pickup configured to record data on a plurality of transport packets of the data streams in a data area of the recording medium, the transport packets having respective packet identifiers (PID); and

a controller configured to control the pickup,
to record a plurality of transport packets of the data streams for a plurality of reproduction paths on the recording medium, the transport packets having respective packet identifiers (PID), and

to record a playlist including a plurality of playitems indicating a playing interval of the data streams ~~on in a navigation area of the recording medium, each of the playing intervals including an IN-point and OUT-point indicating positions of the data streams, each of wherein the playitems including controller is further configured to control the pickup to record a packet identifier information field in the playitem, the packet identifier information a stream indication field indicating the packet identifier (PID) of the transport packets associated with the playitem such that the packet identifier information field identifies for a reproduction path among the plurality of reproduction paths for the playing interval of each of the playitems, where the identified reproduction path of each of the playitems is determined from among a plurality of the data streams.~~

20. (Currently Amended) An apparatus for reproducing ~~[[a]]data structure for managing reproduction of data streams having a plurality of reproduction paths recorded on~~from a recording medium, the apparatus comprising:

a pickup configured to read data from the recording medium~~reproduce a plurality of transport packets of the data streams from a data area of the recording medium, the transport packets having respective packet identifiers (PID); and~~

a controller configured to control the pickup to reproduce a playlist including a plurality of playitems indicating a playing interval of the data streams for a plurality of reproduction paths from a ~~navigation area of the recording medium, each of the playing intervals including an IN-point and OUT-point indicating positions of the data streams, each of~~wherein the playitems including ~~controller is further configured to control the pickup to reproduce a packet identifier information field in the playitem, the packet identifier information a stream indication field indicating the packet identifier (PID) of the transport packets associated with the playitem such that the packet identifier information field identifies~~for a reproduction path among the plurality of reproduction paths, the controller configured to reproduce a data stream of the transport packets having the packet identifier (PID) indicated by the stream indication field from the recording medium~~for the playing interval of each of the playitems, where the identified reproduction path of each of the playitems is determined from among a plurality of the data streams.~~

21. (Previously Presented) The recording medium of claim 1, wherein the data streams are multi-angle data streams, and the playitem further includes a field indicating an angle number.

22. (Previously Presented) The method of claim 17, wherein the data streams are multi-angle data streams, and the playitem further includes a field indicating an angle number.

23. (Previously Presented) The method of claim 17, further comprising:
multiplexing the data streams together.

24. (Previously Presented) The method of claim 18, wherein the data streams are multi-angle data streams, and the playitem further includes a field indicating an angle number.

25. (Previously Presented) The method of claim 18, further comprising:
de-multiplexing the data streams stored multiplexed together.

26. (Previously Presented) The apparatus of claim 19, wherein the controller is configured to control the pickup to record multi-angle data streams in the data area, and the playitem further includes a field indicating an angle number.

27. (Previously Presented) The apparatus of claim 19, wherein the controller is further configured to multiplex the data streams together.

28. (Previously Presented) The apparatus of claim 20, wherein the controller is configured to control the pickup to reproduce multi-angle data streams from the data area, and the playitem further includes a field indicating an angle number.

29. (Previously Presented) The apparatus of claim 20, wherein the controller is further configured to de-multiplex the data streams stored multiplexed together.